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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,595	10/28/2003	William Joseph Semper	2003.10.002.WS0	5366

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EXAMINER	
LIM, STEVEN	
ART UNIT	**PAPER NUMBER**
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/695,595	SEMPER, WILLIAM JOSEPH	
	Examiner	Art Unit	
	Steven Lim	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 3-12, and 14-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over La Porta et al. (US 20020057657) in view of Nieminen et al. (US 20040005884).

4. Regarding Claims 1 and 12, La Porta et al. discloses a handoff system including a first base station (BS9) capable of wirelessly communicating with a source mobile station (mobile device linked with base station, Paragraph 73), a correspondent node (domain root router connects a source base station to the internet and a correspondent node which communicates to a destination, Fig. 2, Items 110 and 150), a mobile

switching center (domain root router) capable of connecting a first and second base station (Paragraph 73) and a local IP network capable of transferring data packets associated with said MS-MS packet data call directly between said first and second base stations via a first packet data bearer connection, wherein said first base station is capable of receiving a first message (handoff path setup message transmitted to new base station to forward to old base station, Paragraph 85-87) from said source mobile station indicating that said source mobile station is to be handed off to a third base station (BS10), and wherein said first base station, in response to said first message, initiates establishment of a second packet data bearer connection on said local IP network for transferring said data packets associated with said MS-MS packet data call directly between said second and third base stations (updates routing entry table for all packets to route from any base station directly to new base station, Paragraph 87), however La Porta et al. fails to disclose the correspondent node communicates to a destination mobile station.

In an analogous art, Nieminen et al. discloses a correspondent node communicating with a destination mobile station (Fig. 3, Item 305 and 307), which enables communication between devices connected through the Internet.

It would have been obvious to one having ordinary skill in the art at the time of invention was made to have the correspondent node communicate with a destination mobile station because it allows communication between devices through the Internet.

5. Regarding Claim 3, La Porta et al. further discloses the first bases station (BS9) is operable to respond to said first message by transmitting a second message to said mobile switching center (router) indicating that said source mobile station is being handed off to said third base station (BS10) and wherein said second message contains and IP address of said second base station on said local IP network (Source IP), a service option field (message type) associated with said MS-MS packet data call, a call identifier value (sequence number) used by said first and second base stations to identify said MS-MS packet data call, and mobile identifier values (mobile device IP and destination IP) associated with said source and destination mobile stations (Handoff message sent to new router which forward to router R7 and router forward to old base station BS9, Paragraph 70 and 87).

6. Regarding Claim 4, La Porta et al. further discloses the second message comprises a Handoff Required message (handoff path setup message, Paragraph 70, and 85-87).

7. Regarding Claim 5, La Porta et al. further discloses transmitting a third message to said third base station (BS10), wherein said third message contains: said IP address of said second base station on said local IP network, said service option field associated with said MS-MS packet data call, said call identifier value used by said first and second base stations to identify said MS-MS packet data call, and said mobile identifier values associated with said source and destination mobile stations (Paragraph 70, 85-87), however La Porta et al. fails to disclose the mobile switching center (router) is operable to respond to said second message and send the message to the third base station.

It would have been obvious to one having ordinary skill in the art at the time of invention was made to send the handoff required message to the old base station to be forwarded through the MSC to the new base station instead of sending the handoff required message directly to the new base station in order to accommodate the mobile station when not yet authorized to communicate with the new base station.

8. Regarding Claim 6, La Porta et al. further discloses the third message comprises a Handoff Request Message (handoff path setup message, Paragraph 85-87).

9. Regarding Claim 7, La Porta et al. further discloses the third base station (BS10) responds to said third message by establishing said second packet data bearer connection (associated interface for all packets delivered to mobile device) with said second base station (BS11)(Paragraphs 75 and 86).

10. Regarding Claim 8, La Porta et al. further discloses the third base station (BS10) established said second packet data bearer connection using an IP address of said second base station, a call identifier value used by said first and second base stations to identify said MS-MS packet data call, and mobile identifier values associated with said source and destination mobile stations (Paragraph 86).

11. Regarding Claim 9, La Porta et al. further discloses the second base station (BS11) responds to the establishment of said second packet data connection by said third base station (BS10) by transmitting data packets associated with said MS-MS packet data call to said third base station via said second packet data bearer connection (data transmitted through default routing path, Paragraph 75).

12. Regarding Claim 10, La Porta et al. further discloses the mobile switching center is operable to transmit a fourth message (packets redirected and router forwards instant handoff path setup message to BS9, Paragraph 87) to said first base station (BS9) after said source mobile station is handed off to said third base station, and wherein said fourth message causes said first base station to notify said second base station (BS11) that said first packet data bearer connection between said first and second base stations is being removed (routing table entry changes, Paragraph 87).

13. Regarding Claim 11, La Porta et al. further discloses the second base station in response to said notification from said first base station that said first packet data bearer connection is being removed ceases transmitting data packets associated with said MS-MS packet data call to said first base station (Paragraph 75).

14. Regarding Claim 14, La Porta et al. further discloses the first bases station (BS9) is operable to respond to said first message by transmitting a second message to said mobile switching center (router) indicating that said source mobile station is being handed off to said third base station (BS10) and wherein said second message contains and IP address of said second base station on said local IP network (Source IP), a service option field (message type) associated with said MS-MS packet data call, a call identifier value (sequence number) used by said first and second base stations to identify said MS-MS packet data call, and mobile identifier values (mobile device IP and destination IP) associated with said source and destination mobile stations (Handoff message sent to new router which forward to router R7 and router forward to old base station BS9, Paragraph 70 and 87).

15. Regarding Claim 15, La Porta et al. further discloses the second message comprises a Handoff Required message (handoff path setup message, Paragraph 70, and 85-87).

16. Regarding Claim 16, La Porta et al. further discloses transmitting a third message to said third base station (BS10), wherein said third message contains: said IP address of said second base station on said local IP network, said service option field associated with said MS-MS packet data call, said call identifier value used by said first and second base stations to identify said MS-MS packet data call, and said mobile identifier values associated with said source and destination mobile stations (Paragraph 70, 85-87), however La Porta et al. fails to disclose the mobile switching center (router) is operable to respond to said second message and send the message to the third base station.

It would have been obvious to one having ordinary skill in the art at the time of invention was made to send the handoff required message to the old base station to be forwarded through the MSC to the new base station instead of sending the handoff required message directly to the new base station in order to accommodate the mobile station when not yet authorized to communicate with the new base station.

17. Regarding Claim 17, La Porta et al. further discloses the third message comprises a Handoff Request Message (handoff path setup message, Paragraph 85-87).

18. Regarding Claim 18, La Porta et al. further discloses the third base station (BS10) responds to said third message by establishing said second packet data bearer

connection (associated interface for all packets delivered to mobile device) with said second base station (BS11)(Paragraphs 75 and 86).

19. Regarding Claim 19, La Porta et al. further discloses the third base station (BS10) established said second packet data bearer connection using an IP address of said second base station, a call identifier value used by said first and second base stations to identify said MS-MS packet data call, and mobile identifier values associated with said source and destination mobile stations (Paragraph 86).

20. Regarding Claim 20, La Porta et al. further discloses the second base station (BS11) responds to the establishment of said second packet data connection by said third base station (BS10) by transmitting data packets associated with said MS-MS packet data call to said third base station via said second packet data bearer connection (data transmitted through default routing path, Paragraph 75).

21. Regarding Claim 21, La Porta et al. further discloses the mobile switching center is operable to transmit a fourth message (packets redirected and router forwards instant handoff path setup message to BS9, Paragraph 87) to said first base station (BS9) after said source mobile station is handed off to said third base station, and wherein said fourth message causes said first base station to notify said second base station (BS11) that said first packet data bearer connection between said first and second base stations is being removed (routing table entry changes, Paragraph 87).

22. Regarding Claim 22, La Porta et al. further discloses the second base station in response to said notification from said first base station that said first packet data bearer

connection is being removed ceases transmitting data packets associated with said MS-MS packet data call to said first base station (Paragraph 75).

23. Claim 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over La Porta et al. (US 20020057657) in view of Nieminen et al. (US 20040005884) as applied to claims 1 and 12 above, and further in view of Padovani (US 6999766).

24. Regarding Claims 2 and 13, La Porta et al. further discloses sending a first message (handoff path setup message, Paragraph 85), however La Porta et al. fails to disclose the first message includes a signal strength measurements associated with the third base station.

In an analogous art, Padovani discloses a mobile station sending a signal strength measurement message that invokes a handoff at a handoff controller (Col. 7, Lines 42-55), which enables a mobile initiated handoff system.

It would have been obvious to one having ordinary skill in the art at the time of invention was made to send a signal strength measurement in a handoff message in order to allow the system to act on a mobile initiated handoff request.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Lim whose telephone number is (571) 270-1210. The examiner can normally be reached on Mon-Thurs 9:00am-4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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SUPERVISORY PRIMARY EXAMINER